GN 691 of 19 June 2020: Regulations on the greenhouse gas emissions intensity benchmark prescribed for the purpose of section 11 of Act
(Government Gazette No. 43452)

NATIONAL TREASURY

I, Tito Titus Mboweni, Minister of Finance, under section 19 (a) of the Carbon Tax Act, 2019 (Act No. 15 of 2019), for the purposes of section 11 of that Act hereby make the regulations as set out in the Schedule hereto.

(Signed)
TT MBOWENI
MINISTER OF FINANCE

SCHEDULE

ARRANGEMENT OF REGULATIONS

1. Definitions.—In these regulations, unless the context otherwise indicates, any word or expression to which a meaning has been assigned in the Carbon Tax Act, 2019 (Act No. 15 of 2019, bears the meaning so assigned, and —

"Carbon Tax Act", means the Carbon Tax Act, 2019 (Act No. 15 of 2019).

2. Greenhouse gas emissions intensity benchmark.—A taxpayer must determine the emissions intensity benchmark for the purposes of determining the sector or subsector greenhouse gas emissions intensity benchmark for the purposes of symbol "A" in section 11 (1) of the Carbon Tax Act, by matching the sector/subsector in respect of that taxpayer contained in the column "Sector/Subsector" with a number calculated according to the benchmark value contained in the same line as that sector or subsector in the column "SA Industry Benchmark Value" in the table in Annexure A.

3. Determining emissions intensity benchmark in respect of more than one emissions intensity benchmark in respect of activity.—Where more than one emissions intensity benchmark exists in respect of an activity, the emissions intensity benchmark for the purposes of symbol "A" in section 11 (1) of the Carbon Tax Act must be determined in accordance with the formula:

$$Y = \frac{Q}{K}$$

in which formula—

(*a*) "Y" represents the emissions intensity benchmark to be determined;

(*b*) "Q" represents a number equal to the sum of amounts of the respective processes in respect of a product which forms part of total of all products produced, which amount must be determined in accordance with the formula:

$$Q = [R \times M]$$

in which formula—

(i) "Q" represents the amount to be determined;

(i) "R" represents a number equal to the production of the respective process in respect of a product which forms part of total of all products produced in respect of which the emissions intensity benchmark must be determined;

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(ii) "M" represents the benchmark in respect of the respective process in respect of a product, determined under regulation 2, which forms part of total of all products produced; and

(*c*) "K" represents a number equal to the production of the total of the products produced in respect of which the emissions intensity benchmark must be determined.

4. Greenhouse gas emissions intensity determination.—A taxpayer must determine the measured and

verified emissions intensity of that taxpayer for the purposes of symbol "B" in the formula prescribed by section 11 (1) of the Carbon Tax Act for the sectors or subsectors of—

(a) (i) iron and steel;

(ii) ferroalloys in respect of ferrochrome and silicomanganese;

(iii) clay brick manufacturing in respect of saleable brick;

(iv) the cement sector, in respect of clinker;

(v) chemicals in respect of nitric acid;

(vi) ilmenite industry in respect of titanium slag;

(vii) sugar industry in respect of raw or white sugar;

(viii) quicklime;

(ix) aluminium; or

(x) ceramic tiles,

in relation to the product produced,

(b) the mining sector in respect of platinum, gold and coal, in relation to the emissions intensity of ore mined;

(c) the pulp and paper sector in respect of tonne CO_2e/tonne wood, pulp and paper;

(e) coal to liquid and gas to liquid petroleum, in relation to a fuel input intensity metric of million tonne CO_2e/energy input into the coal to liquid and gas to liquid process measured in Peta Joules in the applicable tax period; and

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(f) petroleum refining, greenhouse gas emissions per complexity weighted ton in respect of a tax period in accordance with the proprietary benchmarking methodology (Comparative Performance Analysis™ (CPA™)) of HSB Solomon Associates LLC.

5. Short title and commencement.—These regulations are called the Regulations on the greenhouse gas emissions intensity benchmark prescribed for the purpose of section 11 of Carbon Tax Act, 2019 and is deemed to have come into operation on 1 June 2019.

ANNEXURE A

Sector/Sub-sector	SA Industry benchmark value	
Iron and Steel	3.83 tonne CO_2e/tonne crude steel	
Ferroalloys	Ferrochrome – 5.57 tonne CO_2e/tonne ferrochrome	
	Silicomanganese – 6.26 tonne CO_2e/tonne silicomanganese	
Mining Sector – Platinum	Depth of platinum mine in metres	Intensity range in tonne CO_2e/tonne ore mined
	Shallow: 0-300 m	0.004
	Medium: 300-1200 m	0.062
	Deep: 1200-2000 m	0.12
	Concentrators	0.0495 tonne CO_2e/tonne ore milled
	Smelters and refineries	0.395 tonne CO_2e/ounce of metal
Mining Sector – Gold	Depth of gold mine in metres	Intensity range in tonne CO_2e/tonne rock mined
	Shallow: 0-1000 m	0.01
	Medium: 1000-2500 m	0.25
	Deep: 2500-4000 m	0.43
Mining Sector – Coal	Opencast Coal Mining	0.014 tonne CO_2e/tonne run of mine coal
	Underground Coal Mining	0.022 tonne CO_2e/tonne run of mine coal

Cement	1 tonne CO_2e/tonne clinker	
	Integrated white & brown pulp, brown Kraft paper and newspaper	2.542 tonne CO_2e per tonne pulp and paper
	Integrated brown Neutral Sulphite semichemical (NSSC) and brown recycled containerboard	1.045 tonne CO_2e per tonne pulp and paper
	Non-integrated white print paper	1.44 tonne CO_2e per tonne paper
	Non-integrated dissolving wood pulp	1.14 tonne CO_2e per tonne pulp and paper
	Non-integrated brown recycled containerboard	0.984 tonne CO_2e per tonne paper
Pulp and paper	Integrated white print paper and tissue	3.19 tonne CO_2e per tonne pulp and paper
	Integrated white pulp and white & brown Kraft paper	0.59 tonne CO_2e per tonne pulp and paper
	Integrated brown NSSC and brown recycled containerboard and lignosulphonate	2.46 tonne CO_2e per tonne pulp and paper
	Non-integrated brown recycled containerboard and white print paper	1.80 tonne CO_2e per tonne paper
	Non-integrated white recycled containerboard	1.614 tonne CO_2e per tonne paper
	Sawn timber	0.26 tonne CO_2e per tonne wood
Petroleum refining	53,6 kg CO_2e/SA – CWT	
Petroleum (CTL/GTL)	0.0669 Mt CO_2e/PJ energy input	
Clay brick manufacturing	0.28 tonne $CO_2{}_e$/tonne saleable bricks	
Chemicals – Nitric Acid	0.68 tonne CO_2e/tonne 100% nitric acid	
Ilmenite industry – Titanium slag	3.9 tonne CO_2e/tonne titanium slag	
Quicklime	1.322 tonne CO_2e/tonne quicklime	
Sugar	Raw sugar – 0.217 tonne CO_2e/tonne raw sugar	
	White – 0.601 tonne CO_2e/tonne white sugar	
	Raw and white sugar – 0.217 to 0.601 tonne CO_2e/tonne white sugar and raw sugar	
Aluminium	16.13 tonne CO_2e/tonne aluminium	
Ceramic tile	0.3 tonne CO_2e/tonne ceramic tile	